



# Mobile Policy Diameter Commands

- [diameter](#), on page 1
- [diameter application](#), on page 1
- [diameter group](#), on page 2
- [diameter group stack](#), on page 3
- [diameter group stack diameter-engine alt-engines](#), on page 4
- [diameter group stack diameter-engine alt-engines primary](#), on page 5
- [diameter group stack diameter-engine alt-engines secondary](#), on page 5
- [diameter group stack grpc ext-svc](#), on page 5
- [diameter group stack settings timeouts-ms](#), on page 6
- [diameter grpc](#), on page 7
- [diameter grpc channel](#), on page 7
- [diameter next-hop-route next-hop-host](#), on page 8
- [diameter settings timeouts-ms](#), on page 8

## diameter

Displays the configured Diameter stack definition.

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**Command Modes** Exec

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**Syntax Description** `show diameter`

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**Usage Guidelines** Use this command to view the configured Diameter stack definition.

### Example

The following command displays the configured Diameter stack definition:

```
show diameter peer-status
```

## diameter application

Configures the Diameter application definition.

**Command Modes**

Exec &gt; Global Configuration

**Syntax Description**

```
diameter application application_name { application-id application_id |
tgpp-application { false | true } | vendor vendor_id}
```

**application-id** *application\_id*

Specify the application ID.

Must be an integer.

**application** *application\_name*

Specify the application abbreviation. For example, gx.

Must be a string.

**tgpp-application** { **false** | **true**}

Specify whether the application is a 3GPP application.

Must be one of the following:

- **false**
- **true**

Default Value: false.

**vendor** *vendor\_id*

Specify the vendor IDs.

Must be an integer.

**Usage Guidelines**

Use this command to configure the Diameter application definition.

## diameter group

Configures the Diameter stack group parameters.

**Command Modes**

Exec &gt; Global Configuration

**Syntax Description**

```
diameter group [ group group_name | mode mode | repository repository_name |
stack stack_name ]
```

**group** *group\_name*

Specify the group and stack name.

Must be a string in the pattern [a-zA-Z][a-zA-Z0-9]\*.

**mode** *mode*

Specify the mode in which the Diameter stack must run.

Must be one of the following:

- **client**
- **server**

Default Value: client.

**repository** *repository\_name*

Specify the helm repository.

### Usage Guidelines

Use this command to configure the Diameter stack group.

## diameter group stack

Configures the Diameter stack definition.

### Command Modes

Exec > Global Configuration

### Syntax Description

```
diameter group group_name stack stack_name { application application_name | bind-ip
bind_ip_address | bind-port bind_port_number | fqdn fqdn_name | realm realm |
peer-host peer_host_name | peer-port peer_port_number | peer-realm peer_realm |
node-host node_host}
```

**application** *application\_name*

Specify the Diameter application.

**bind-ip** *bind\_ip\_address*

Specify the IP address to use in the CER or CEA message.

**bind-port** *bind\_port\_number*

Specify the port number to bind the server.

Default Value: 3868.

**fqdn** *fqdn*

Specify the fully qualified domain name (FQDN) to use in CER or CEA messages.

Must be a string.

**node-host** *node\_host*

Specify the node host to start the stack on.

Must be a string.

**peer-host** *peer\_host\_name*

Specify the remote peer host address or FQDN.

Must be a string.

**peer-port *peer\_port\_number***

Specify the peer port number.

Default Value: 3868.

**peer-realm *peer\_realm***

Specify the remote peer realm.

Must be a string.

**realm *realm***

Specify the realm to use in CER or CEA messages.

Must be a string.

**replicas *replica\_count***

Specify the replica count.

Must be an integer.

Default Value: 1.

**stack *stack\_name***

Specify the stack name.

Must be a string.

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**Usage Guidelines**

Use this command to configure the Diameter stack definition.

## diameter group stack diameter-engine alt-engines

Configures the alternate Diameter engine parameters.

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**Command Modes**

Exec > Global Configuration > Diameter Group Configuration > Stack Configuration

---

**Syntax Description**

**diameter-engine alt-engines check-session-exists { false | true }**

**check-session-exists { false | true }**

Specify whether to check if the session exists on the alternate-engines before forwarding requests.

Must be one of the following:

- **false**
- **true**

Default Value: false.

**Usage Guidelines** Use this command to configure the alternate Diameter engine parameters.

## diameter group stack diameter-engine alt-engines primary

Configures the primary Diameter Engine parameters.

**Command Modes** Exec > Global Configuration > Diameter Group Configuration > Stack Configuration

**Syntax Description** **primary** **svc-name** *service\_name* **port** *port\_number*

**port** *port\_number*

Specify the port number exposed by the external service.

Default Value: 8884.

**svc-name** *service\_name*

Specify the external service name that represents the Diameter engine.

**Usage Guidelines** Use this command to configure the primary Diameter Engine parameters.

## diameter group stack diameter-engine alt-engines secondary

Configures the secondary Diameter Engine parameters.

**Command Modes** Exec > Global Configuration > Diameter Group Configuration > Stack Configuration

**Syntax Description** **secondary** **svc-name** *service\_name* **port** *port\_number*

**port** *port\_number*

Specify the port number exposed by the external service.

Default Value: 8884.

**svc-name** *service\_name*

Specify the external service name that represents the Diameter engine.

**Usage Guidelines** Use this command to configure the secondary Diameter Engine parameters.

## diameter group stack grpc ext-svc

Configures the external gRPC service parameters for the Diameter interface.

**Command Modes** Exec > Global Configuration

**Syntax Description** **diameter grpc** [ **port** *port\_number* | **ip** *ip\_address* ]

**ip *ip\_address***

Specify the gRPC server's IP address.

**port *port\_number***

Specify the port number to bind the server.

Default Value: 8868.

**Usage Guidelines**

Use this command to configure the external gRPC service parameters for the Diameter interface.

## diameter group stack settings timeouts-ms

Configures the timeout parameters for the Diameter interface.

**Command Modes**

Exec > Global Configuration

**Syntax Description**

```
diameter settings timeout-ms [ cea cea_timeout | dpa dpa_timeout | dwa dwa_timeout
| iac inactivity_timeout | request request_timeout | stop timeout_stop_diameter ]
```

**cea *cea\_exchange\_timeout***

Specify the timeout duration for completing the CEA exchange in milliseconds.

Must be an integer.

Default Value: 10000.

**dpa *dpa\_timeout***

Specify the DPA timeout duration in milliseconds.

Must be an integer.

Default Value: 10000.

**dwa *dwa\_timeout***

Specify the DWA timeout duration in milliseconds.

Must be an integer.

Default Value: 10000.

**iac *inactivity\_timeout***

Specify the inactivity timeout duration in milliseconds.

Must be an integer.

Default Value: 5000.

**request *request\_timeout***

Specify the request timeout duration in milliseconds.

Must be an integer.

Default Value: 1750.

### **stop *stop\_timeout***

Specify the timeout duration for stopping the Diameter interface in milliseconds.

Must be an integer.

Default Value: 9000.

#### **Usage Guidelines**

Use this command to configure the timeout duration for the Diameter interface.

#### **Example**

The following command configures the timeout duration for the Diameter interface:

```
diameter settings timeout-ms [ cea 10000 | dpa 10000 | dwa 10000 | iac 5000 | request 1750
| stop 9000 ]
```

## diameter grpc

Configures the global gRPC settings.

#### **Command Modes**

Exec > Global Configuration

#### **Syntax Description**

**diameter grpc channel count** *count*

#### **Usage Guidelines**

Use this command to configure the global gRPC settings.

#### **Example**

The following command configures the global gRPC settings:

```
diameter grpc channel count 100
```

## diameter grpc channel

Configures the gRPC channels to open towards the server.

#### **Command Modes**

Exec > Global Configuration

#### **Syntax Description**

**diameter grpc channel count** *channel\_count*

#### **channel *channel\_count***

Specify the number of channel to open towards the server.

Must be an integer.

Default Value: 10.

**Usage Guidelines** Use this command to configure the gRPC channels to open towards the server.

## diameter next-hop-route next-hop-host

Configures the next-hop host name.

**Command Modes** Exec > Global Configuration

**Syntax Description** `next_hop_realm rating rating`

**next-hop-host-name** *hostname\_list*

Specify the DRA hosts name list as received in the Origin-Host AVP in CER or CEA message.

Must be a string.

**rating** *rating*

Specify the rating that determines the priority.

Must be an integer.

Default Value: 0.

**Usage Guidelines** Use this command to configure the next-hop host name.

### Example

The following command configures the next-hop host name:

```
next_hop_realm rating 2
```

## diameter settings timeouts-ms

Configures the timeout parameters for the Diameter interface.

**Command Modes** Exec > Global Configuration

**Syntax Description** `diameter settings timeout-ms [ cea cea_timeout | dpa dpa_timeout | dwa dwa_timeout | iac inactivity_timeout | request request_timeout | stop timeout_stop_diameter ]`

**cea** *cea\_exchange\_timeout*

Specify the timeout duration for completing the CEA exchange in milliseconds.

Must be an integer.

Default Value: 10000.



**dpa *dpa\_timeout***

Specify the DPA timeout duration in milliseconds.

Must be an integer.

Default Value: 10000.

**dwa *dwa\_timeout***

Specify the DWA timeout duration in milliseconds.

Must be an integer.

Default Value: 10000.

**iac *inactivity\_timeout***

Specify the inactivity timeout duration in milliseconds.

Must be an integer.

Default Value: 5000.

**request *request\_timeout***

Specify the request timeout duration in milliseconds.

Must be an integer.

Default Value: 1750.

**stop *stop\_timeout***

Specify the timeout duration for stopping the Diameter interface in milliseconds.

Must be an integer.

Default Value: 9000.

---

**Usage Guidelines**

Use this command to configure the timeout duration for the Diameter interface.

**Example**

The following command configures the timeout duration for the Diameter interface:

```
diameter settings timeout-ms [ cea 10000 | dpa 10000 | dwa 10000 | iac 5000 | request 1750  
| stop 9000 ]
```

diameter settings timeouts-ms